

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 60-066231

(43)Date of publication of application : 16.04.1985

(51)Int.Cl.

G02F 1/133

C09K 19/00

(21)Application number : 58-176016

(71)Applicant : IDEMITSU KOSAN CO LTD

(22)Date of filing : 21.09.1983

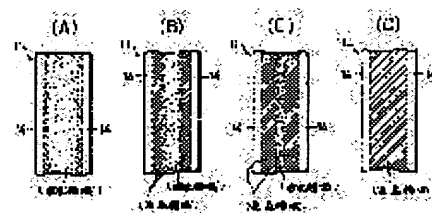
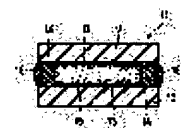
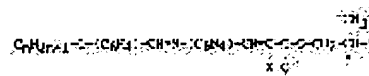
(72)Inventor : HASHIMOTO KENJI
ISHIKAWA KEN
MIYASATO YOSHIHIRO

(54) METHOD FOR ARRANGING AND TREATING LIQUID CRYSTAL MOLECULE

(57)Abstract:

PURPOSE: To enable arrangement and treatment of a large area (large volume) of liquid crystal as well in short time by arranging liquid crystal molecules while applying Joule heat from electrodes to the liquid crystal in a liquid crystal cell to give a temp. gradient thereto.

CONSTITUTION: A liquid crystal compd., more particularly ferroelectric liquid crystal compd., for example, a liquid crystal compd. 15 of the azomethine expressed by the formula (X is H, CH₃, CN, Cl, etc., Y is C₂H₅Cl, etc., n is 5W14) is sealed between base plates 12 having respectively operating electrodes 13, 13 via a spacer 14 to form an element 11. Such element is put into a heating furnace kept at the temp. at which the liquid crystal compd. is isotropic liquid. The temp. in the heating furnace is continuously decreased while electric current for heating is passed to the electrodes 13. The liquid crystal 15 is thereby gradually cooled from the space 14 side and a batonnet (nucleus of crystal) is generated to have an oriented liquid crystal region from the isotropic liquid until finally the arranged state uniform over the entire layer is orderly formed. The arranged state is thus formed in shorter time than in the prior art even with a viscous smectic liquid crystal or further a thin film cell or large volume cell. A sharp display function is obtd.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office